VARIETY TEST.

Plot.	Variety.				Crop per Acre.	
100.	valledy.	Roots.	Tops.			
	Yellow-fleshed—continued.			Tons.	Tons	
14	Montgomery's Aberdeen Green-top Yel	low		14.28	0.81	
15	,, Aberdeen Purple-top Ye	llow		15.50	2.45	
16	" Fosterton Hybrid			16.32	2.04	
17	" Green-top Yellow Tanks	rd		19.99	2.45	
18	Nimmo and Blair's Challenger White-fleshed—			14.28	0.81	
19	Garton's Hardy Green Globe			22.85	2.04	
20	Sutton's Red Paragon			24.89	2.45	
21	Early Six Weeks			17.09	1.63	
22	,, Purple-top Mammoth			18.77	1.21	
23	,, Pomeranian White Globe			16.76	1.63	
24	,, Imperial Green Globe			16.32	0.46	
25	Montgomery's White Stone		11	20.81	0.81	
26	Darrandina Charatana			22.03	1.63	
27	" Lincolnshire Red Globe			26.11	2.04	

Inspector Manning reports: The experiments were initiated under favourable conditions, the land being in perfect order. The grub did some damage to the plants in their early growth. The weather was unfavourable from 1st January to date of harvesting, being too cold and wet. The crop was free from fungoid disease.

WAIMATE DISTRICT.

Manurial and Variety Test, conducted by G. Reynolds, Willowbridge.

The land selected was a sandy loam on a clay subsoil. It was in grass three years prior to 1910 when ploughed and crop of turnips taken. For present experiment it was skim-ploughed and tine-harrowed in October, 1911; rolled, ploughed 6 in. deep, tine-harrowed, disc-harrowed, tine-harrowed, rolled, and again tine-harrowed several times and thrown into raised drills during the first half of November, 1911. In the manural test the area was divided into seven manural plots and one unmanured as a test plot. Plots one-tenth acre each. The fertilizers applied were according to a scheme designed by the Chief Agricultural Chemist. The variety of seed sown was Fosterton Hybrid. In the variety test 1 cwt. superphosphate per acre was applied. The seeds and fertilizers were sown in raised drills on 15th November, 1911; drills 28 in. apart. The roots were pulled and weighed on 30th May, 1912. Results:—

MANURIAL TEST.

Plot.		Cost per	Weight of Crop per Acre.		Effect of	
	Manures per Acre.	Acre.	Roots.	Tops.	Manuring.	
		£ s. d		Tons.		Tons.
1	Superphosphate, 1½ cwt	0 7 2	16.42	2.32	Gain,	6.42
2	Superphosphate, 3 cwt	0 14 3	19.82	3.21	,,	9.82
3	Superphosphate, 2 cwt.; bonedust, 3 cwt.	0 14 0	17-67	2.85	**	7.67
4	No manure		10.00	1.42		
5	Same as No. 3 mixture; sulphate of potash, 28 lb.	0 17 9	16-60	2.14	Gain,	6.60
6	No. 5 mixture, 13 cwt.	0 8 11	18.57	2.32	**	8.57
7	Same as No. 6 mixture; salt, 14 lb.	0 9 2	15.00	2.32	,,	5.00
8	Albatross guano, 2 cwt	0 10 0	19.97	2.32	,,	9.97